Significant Deficiencies

Source

- 1. Well near source of fecal contamination (ex. septic systems, sewer lines)
- septic systems, sewer lines, or other contaminant sources close to well/spring
- well head not sealed
- column/casing vent not screened
- hose bib faucet prior to check valve
- abandoned holes not properly sealed
- 2. Well in flood zone (100 year)
- 3. Improperly constructed well (ex. not properly grouted)
- well not grouted according to MSDH requirements
- well casing is compromised
- well screen is compromised
- 4. Spring boxes that are poorly constructed and/or are subject to flooding

Treatment

- 1. Inadequate application of treatment chemicals and techniques (Primary MCLs)
- disinfection
- corrosion control
- THM/precursor removal
- inorganic removal
- other MCL related
- inadequate application of treatment chemicals
- 2. Lack of redundant mechanical components where treatment is required -
- If a system has only one source, then they must have two separate treatment trains such as two separate booster pumps/chlorinators or two solution pumps.
- 3. Unprotected cross-connections within treatment system
- 4. Inadequate monitoring (Primary MCLs)
- inadequate disinfection or CT
- inadequate monitoring of disinfection residual
- inadequate operation/maintenance of treatment monitoring equipment
- inadequate treatment monitoring equipment
- inadequate records of treatment parameter sampling

Distribution Systems

- 1. Negative pressure that could result in contamination -
- Pressure gauge or logger data indicating sustained low pressures on the distribution main
- Hydraulic model output showing negative pressure areas in the system.
- 2. Inadequate disinfectant residual monitoring
- System not flushed periodically
- 3. Unprotected cross-connections
- system not surveyed for cross connections
- devices not tested as required by Law
- failing devices not repaired/replaced and retested

Finished Water Storage

- 1. Inadequate internal cleaning/maintenance of storage tanks
- tank not inspected periodically
- recommended actions of inspection not completed in a reasonable time
- 2. Improper screening of overflow pipes, drains, or vents
- 3. Necessary repairs of storage tank roofs or covers not made

Pumps/Pump Facilities and Controls

- 1. Inadequate pump capacity
- 2. Inadequate maintenance
- 3. Inadequate/inoperable control system

Monitoring/Reporting/Data Verification

- 1. Not monitoring according to site sampling plan or monitoring plan
- 2. Not meeting reporting requirements
- 3. Improper recordkeeping

Water System Management/Operation

- 1. Failure to meet water supply demands (overloaded by serving greater than 100% capacity)
- 2. No approved emergency response plan or vulnerability analysis (updated annually)

- 3. Inadequate follow-up on previous deficiencies
- 4. Inadequate security measures
- no updated vulnerability analysis
- no updated emergency plan
- inadequate fencing of wells, tanks, pump stations, etc. all vulnerable facilities not secured/locked

Operator Compliance with State Requirements

- 1. Operator is not qualified as required by the State
- 2. Lack of required operator training